

Lever Enhanced Pedaling System

Abstract: The Lever Enhanced Pedaling System is a symmetrical assembly of components founded on a rear frame of a vehicle, which holds two horizontal shafts, parallel to the length of the frame, with one shaft being directly above the other positioned below the level of the seat. Each horizontal shaft occupies one metal flat linear plate (32) through its flat surface centrally, providing it with pivotal ability at this connection. The adjacent ends of the two plates share a vertical connection to the upper portion of their own vertical beam (34) member with pivotal ability at this connection. These connections are adapted to provide both vertical beams (34) with a slight curved vertical movement, while the beams are 90 degrees and parallel to each other. These parallel connections (22) provide the means for each lever (2), connected to the lower end of their vertical beam member (34), to swing up and down in a reciprocating motion. Both levers (2) are adapted to be pressed down from a pedal (30) connected to their leading outer ends, while pivoting on their connection to the frame of the vehicle, which is located near the very rear of the this frame behind the axle of the vehicle's wheel. Each lever (2) is provided with means to pull down their own chain (14) member connected to their own chain slide fastening apparatus (6), fastened with sliding ability within the chain slide groove (26) of their member lever (2). Each chain (14) is arranged to interact with their own members of sprockets, which includes a stationary sprocket (10), central sprocket (12) connected to the wheel of vehicle and sprocket with vertical movement ability (8). Each sprocket has a connection to the frame of the vehicle, with means of rotational interaction in the direction of their chain (14) member's movement, as both chains are pulled in a reciprocal motion. The downward pull of each chain rotates the central sprocket (12) against the rear wheel to turn and roll the vehicle forward. The Lever Enhanced Pedaling System has a system providing the means to change the ratio of rear wheel revolutions per pedal.